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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,678	01/27/2004	Younger Ahluwalia	03137.000007	3037
5514	7590	10/19/2006		
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112				
EXAMINER				
RUDDOCK, ULA CORINNA				
ART UNIT		PAPER NUMBER		
1771				

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/766,678

Applicant(s)

AHLUWALIA ET AL.

Examiner

Ula C. Ruddock

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 9/21/06.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. The Examiner has carefully considered Applicant's response filed August 2, 2006. The previously set forth rejections have been maintained.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 103***

3. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahluwalia (US 5,965,257) in view of Farrar (US 5,338,349) and Langer (US 4,600,634). Ahluwalia disclose a structural article used in a wide variety of products including fire walls, vapor barriers, roofing underlayment, and facing sheets (col 3, ln 34-42). The articles comprise a substrate having an ionic charge which is coated with a coating having essentially the same ionic charge. The coating consists of a filler material and a binder material. The binder comprises an acrylic latex, specifically Hycar 2679 (col 3, ln 5-9). It should be noted that Hycar 2679 polymer emulsion contains synthetic soap, sometimes known as surface active agents or surfactants (col 7, ln 16-19), thus meeting Applicant's limitation of a surfactant component. Furthermore, because a surfactant is present in Ahluwalia's composition, surfactant-generated microcells would also be present in the material. The substrate is preferably fiberglass and the filler is selected from fly ash, charged calcium carbonate, and ceramic microspheres. The binder is preferably acrylic latex (abstract) or SBR latex (col 3, ln 11-12). Ahluwalia further discloses that it is well known to include clay as a filler material in structural articles in the building industry (col 1, ln 12-26). The articles are planar in shape and the substrate is coated on one side or both sides depending on the intended application

(col 3, ln 42-44). The structural material may be coated on one or both sides with a water repellent material, an algaecide, an antifungal material, an antibacterial material, a surface friction agent, a flame retardant material, and a coloring dye (col 3, ln 54-67 to col 4, ln 1-3). The structural article contains 10-25% by weight glass fibers (claim 13) and the coating comprises nearly 85% by weight of the article (col 3, ln 17-18). Ahluwalia discloses the claimed invention except for the teaching of a gel catalyst component and that a metallic component is adhered to the coated substrate on one or both sides of the substrate.

Farrar (US 5,338,349) discloses a fire resistant and high temperature insulating composition. The composition comprises a binder and a gelling agent. The composition can be used as a coating composition (abstract). The composition can be coated onto articles made of glass and onto fabrics (col 2, ln 31-34). Other components of the composition include dyes and fungicides (col 2, ln 26-28). The binder used in the composition can be polyvinyl alcohol, which is a type of binder described in Applicant's specification at paragraph [0019]. The gelling agent is capable of absorbing water and expanding in size to provide a degree of elasticity to the moist composition (col 5, ln 26-29). It should be noted that the gelling agent of Farrar is being equated to the gel catalyst of the present invention.

Langer (US 4,600,634) discloses flexible fibrous endothermic sheet materials for fire protection. The flexible sheet is made of fiberglass and acrylic binder and is useful in building construction (abstract). Fillers useful in the composition include alumina trihydrate (col 3, ln 59). A backing, comprising an aluminum foil, is added to the backing of the sheet material to give an added degree of strength to the sheet material (col 4, ln 8-10).

It would have been obvious to have used Farrar's gelling agent in the composition of Ahluwalia and Langer, motivated by the desire to create a composition that has some degree of elasticity and to improve the fire resistance of the coated material.

It also would have been obvious to one having ordinary skill in the art to have added Langer's aluminum sheet to one or both sides of the coated substrate of Ahluwalia and Farrar, motivated by the desire to create a structural article with increased strength and durability.

***Rejection is maintained.***

#### ***Response to Arguments***

4. Applicant's arguments filed August 2, 2006, have been fully considered but they are not persuasive for the reasons set forth. Applicant argues that the Ahluwalia reference teaches away from surfactant generated microcells because Ahluwalia discloses the use of defoaming agents. This argument is not persuasive because the present invention, at paragraph [0058] of the specification, also discloses the use of a defoamer. Therefore, the Examiner maintains the position that the use of Hycar 2679, as shown by Ahluwalia, would generate microcells despite the use of defoaming agents. This reasoning is based upon the fact that Applicant's present invention discloses surfactant generated microcells despite the use of a defoamer. Applicant further argues that Farrar's gelling agent is not a gel catalyst. This argument is not persuasive because it is the Examiner's position that the gelling agent of Farrar will accelerate, to a certain extent, gel formation. Because Applicant's specification and claims fail to specify a time period in which the gel is formed, the gelling agent of Farrar can properly be equated to Applicant's gel catalyst. Therefore, the rejection is maintained.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C. Ruddock whose telephone number is 571-272-1481. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*UCR*  
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